



Instrumentation Cables · Power Cables
Control Cables · Communications Cables
Specialty Cables

Wired for Power Generation

Serving the Power Generation Market



Wired for Power Generation



Escalating demand for energy is fueling ongoing expansion of the power-generation infrastructure. To compete in today's cost-driven and deregulated marketplace, companies designing, building and equipping power-generation facilities can benefit from a single source for high-quality products, technical support and service.

General Cable has annual global energy and industrial cable revenues in excess of \$2 billion for power generation, transmission and distribution worldwide and is the largest energy products supplier in North America.

Our commitment is to provide our customers with the broadest range of cable products in the industry, backed by unparalleled performance, application-specific expertise, the most extensive R&D programs and a century of manufacturing experience.

Quality Assurance and Industry Approvals

General Cable products meet or exceed all applicable industry quality and environmental standards and approvals.

- ISO
- NRC and EPA
- UL/NEC and CSA/CEC
- AEIC, ASTM, ICEA, IEEE and NEMA

INTERNATIONAL
ISO 9001:2000
CERTIFICATION

Serving the Power Generation Market

Products for All Types of Energy Resources

No matter the project resource, requirements or environment, General Cable offers the industry's most comprehensive line of instrumentation, power, control, communications and specialty cables available today.



Fossil Fuels

General Cable is the leader in products for power generation from fossil fuels, including natural gas, coal and fuel oil. Our complete product offering consists of instrumentation, power, control, copper and fiber optic communications, and specialty cables.

To ensure General Cable products perform under the most demanding and extreme conditions, we offer application-specific designs in thermoplastic and thermoset jacket and insulating systems. Our cables withstand difficult environments such as extreme temperatures, high humidity and corrosive atmospheres and are a match for even the most severe physical conditions. No application is too challenging.

In fact, our ground-breaking technology has led to such industry firsts as the highly flame-retardant FREP® family of tray cables, respected for their excellent electrical, thermal and physical properties. We also originated UniShield®, the smallest superior-performance, medium-voltage power cable offered today.

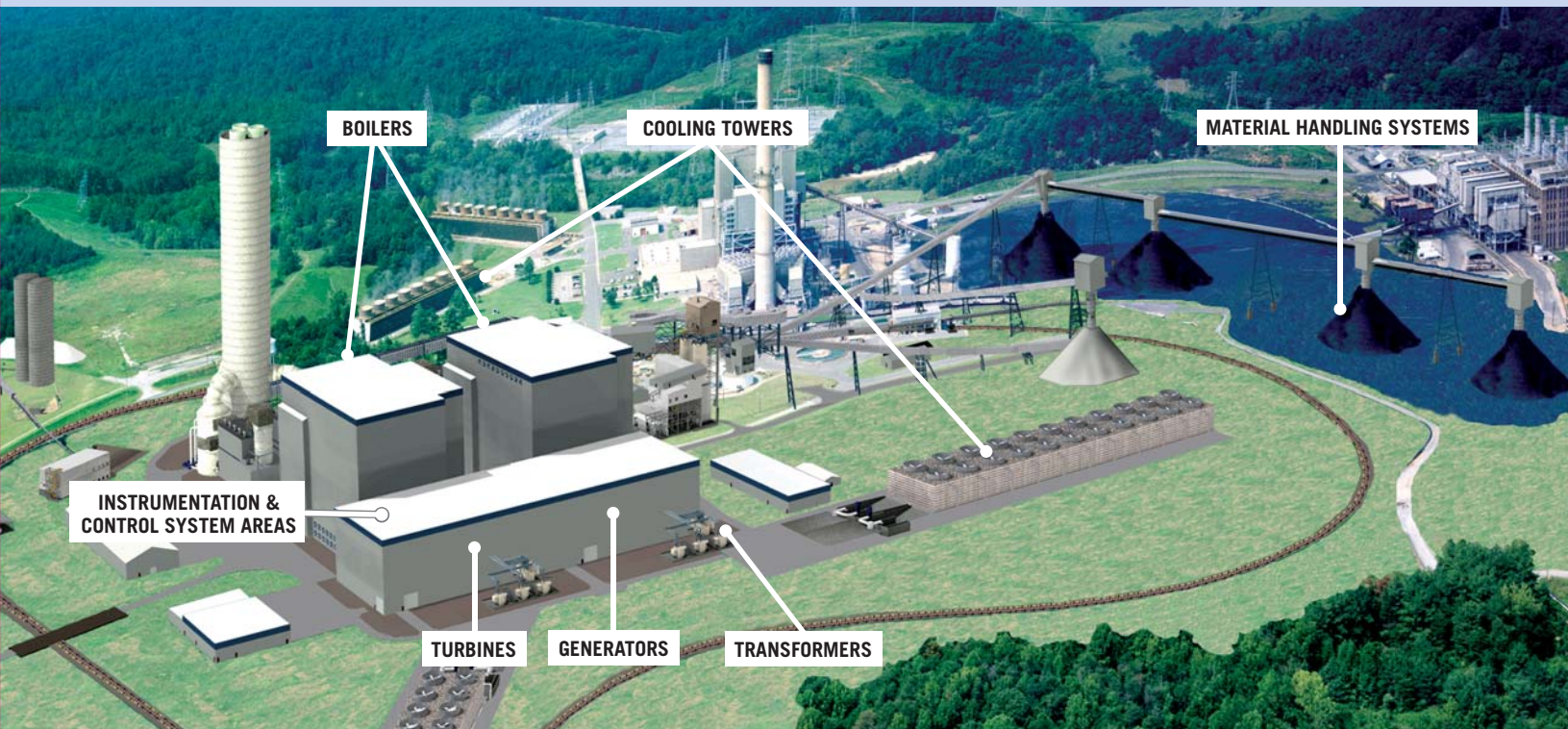


Nuclear Power

General Cable is one of a few cable manufacturers worldwide that is certified and qualified to supply high-quality nuclear-grade Class 1E cable to power generating plants, original equipment manufacturers, and storage and waste management facilities. Our exclusive line of Ultrol® products provides superior reliability for every nuclear-generating application, including 40-year service life capability, environmental qualification and maximum safety.

For more than three decades, General Cable has answered the needs of the nuclear power market with our Brand Rex Brand Ultrol 600 volt insulated cables—from single conductor switchboard and power cables, to multi-conductor instrumentation, control, low-voltage power and coaxial/triaxial cables.


General Cable's Ultrol products have demonstrated their ability to deliver 40 years of reliable service by passing the stringent Loss of Coolant Accident (LOCA) and Steam Line Break (SLB) tests as well as postulated Design Basis Event (DBE) testing. All of General Cable's nuclear-rated 1E products meet IEEE 323-1974 and IEEE 383-1974 requirements.



Power Generation Product Cross-Reference

INSTRUMENTATION 600V CABLES—90°C WET OR DRY


Compliances¹: ANSI N45.2† · ICEA S-73-532 · ICEA S-82-552 · ICEA T-29-520 · IEEE 323† · IEEE 383 · IEEE 1202 · NRC 10CFR50† · UL 1277 · UL 1581 · VW-1

Product Line	Insulation	Jacket	Specification	NEC Code Type
CHTC®	XLPE	HYP (CSPE)/Elastomer Blend	2050	UL Type TC
FREP®	FR-EPR	CPE	2100, 2150, 2200	UL Type TC
 Ultrol® Class 1E Nuclear	Ultrol FR-XLPE	Hypalon®	200, 225, 250	N/A

¹Compliances as applicable. †Applicable to Nuclear only.

MULTI-CONDUCTOR 600V CONTROL CABLES—90°C WET OR DRY


Compliances¹: ANSI N45.2† · ICEA S-73-532 · ICEA S-95-658/NEMA WC70 · ICEA T-29-520 · IEEE 323† · IEEE 383 · IEEE 1202 · NRC 10CFR50† · UL 1277 · UL 1581 · UL 44 · VW-1

Product Line	Insulation	Jacket	Specification	NEC Code Type
CHTC®	XLPE	HYP (CSPE)/Elastomer Blend	4050, 4075	UL Type TC
FREP®	FR-EPR	CPE	4300, 4310	UL Type TC-ER ²
FREP® Shielded	FR-EPR	CPE	4325	UL Type TC-ER ²
 Ultrol® Class 1E Nuclear	Ultrol FR-XLPE	Hypalon®	275, 300	N/A

¹Compliances as applicable. ²-ER as applicable. See individual specifications. †Applicable to Nuclear only.

MULTI-CONDUCTOR 600V POWER CABLES—90°C WET OR DRY


Compliances¹: ANSI N45.2† · ICEA S-73-532 · ICEA S-95-658/NEMA WC70 · ICEA T-29-520 · IEEE 323† · IEEE 383 · IEEE 1202 · NRC 10CFR50† · UL 44 · VW-1 · UL 1277 · UL 1581

Product Line	Insulation	Jacket	Specification	NEC Code Type
CHTC®	XLPE	HYP (CSPE)/Elastomer Blend	4100	UL Type TC-ER ²
FREP®	FR-EPR	CPE	4350	UL Type TC-ER ²
 Ultrol® Class 1E Nuclear	Ultrol FR-XLPE	Hypalon®	325	N/A

¹Compliances as applicable. ²-ER as applicable. See individual specifications. †Applicable to Nuclear only.

SINGLE CONDUCTOR 600V POWER CABLES—90°C WET OR DRY

Compliances¹: ANSI N45.2† · ICEA S-95-658/NEMA WC70 · ICEA T-29-520† · IEEE 323† · IEEE 383† · IEEE 1202† · NRC 10CFR50† · Sizes 1/0 and larger listed and marked "SUN RES FOR CT USE" in accordance with NEC · UL 44 · UL 854 · VW-1

Product Line	Insulation	Jacket	Specification	NEC Code Type
DuraSheath®	EPR	HYP (CSPE)/Elastomer Blend	5050	UL Type RHH/RHW-2/USE-2 LS
Unicon® FREP®	FR-EPR	—	5100	UL Type RHH/RHW-2/USE-2
Unicon® XLPE	XLPE	—	5250	UL Type RHH/RHW-2/USE-2
 Ultrol® Class 1E Nuclear	Ultrol FR-XLPE	Hypalon®*	100, 125, 150, 175	N/A

¹Compliances as applicable. †Applicable to Nuclear only. ‡For 1/0 AWG and larger. *Specification 175.

MEDIUM-VOLTAGE 5kV–35kV SHIELDED POWER CABLES—105°C

Compliances¹: AIEC CS8 · ICEA S-93-639 · ICEA S-97-682 · IEEE 1202 · Sizes 1/0 AWG and larger listed and marked "SUN RES FOR CT USE" in accordance with NEC · UL 1072

Product Line	Insulation	Shield	Jacket	Specification	NEC Code Type
5kV/133% & 8kV/100% 1/C UniShield®	EPR	Corrugated Copper Wire	Semi-Conducting CPE	6100	MV-105
15kV/133% 1/C UniShield®	EPR	Corrugated Copper Wire	Semi-Conducting CPE	6300	MV-105
25kV/133% & 35kV/100% 1/C UniShield®	EPR	Corrugated Copper Wire	Semi-Conducting CPE	6500	MV-105
5kV/133% & 8kV/100% 1/C Uniblend®**	EPR	Copper Tape	PVC	6150	MV-105
15kV/133% 1/C Uniblend®**	EPR	Copper Tape	PVC	6350	MV-105
25kV/133% & 35kV/100% 1/C Uniblend®**	EPR	Copper Tape	PVC	6550	MV-105
5kV/133% & 8kV/100% 3/C Uniblend®**	EPR	Copper Tape	PVC	6250	MV-105
15kV/133% 3/C Uniblend®**	EPR	Copper Tape	PVC	6450	MV-105
25kV/133% & 35kV/100% 3/C Uniblend®**	EPR	Copper Tape	PVC	6600	MV-105

¹Compliances as applicable. **Uniblend® constructions are also available with CPE jackets.

FIBER OPTIC COMMUNICATION CABLES

NextGen® Brand products range from tight buffer and armored cables, to loose tube and hybrid cables, as well as advanced Blolite® blown fiber systems for LAN applications.





NOTE: Nuclear Coaxial/Triaxial cables are available upon request. All nuclear cable types are available in a variety of shielded and/or armored constructions for cable tray and raceway installations.



NUCLEAR

 **General Cable**
www.generalcable.com

Power Generation Application Cross-Reference

Product Line	Specification	Instrumentation & Control System Areas	Generators	Turbines	Boilers	Material Handling Systems	Transformers	Cooling Towers
INSTRUMENTATION 600V CABLES—90°C WET OR DRY								
CHTC® (XLPE/HYP) UL Type TC	2050	☑	☑	☑	☑	☑	☑	☑
FREP® (FR-EPR/CPE) UL Type TC	2100, 2150, 2200	☑	☑	☑	☑	☑	☑	☑
 Ultrol® (FR-XLPE/Hypalon®) Class 1E Nuclear	200,225,250	☑	☑	☑	☑	☑	☑	☑
MULTI-CONDUCTOR 600V CONTROL CABLES—90°C WET OR DRY								
CHTC® (XLPE/HYP) UL Type TC	4050, 4075	☑	☑	☑	☑	☑	☑	☑
FREP® (FR-EPR/CPE) UL Type TC-ER	4300, 4310	☑	☑	☑	☑	☑	☑	☑
FREP® Shielded (FR-EPR/CPE) UL Type TC-ER	4325	☑	☑	☑	☑	☑	☑	☑
 Ultrol® (FR-XLPE/Hypalon®) Class 1E Nuclear	275, 300	☑	☑	☑	☑	☑	☑	☑
MULTI-CONDUCTOR 600V POWER CABLES—90°C WET OR DRY								
CHTC® (XLPE/HYP) UL Type TC-ER	4100	☑	☑	☑	☑	☑	☑	☑
FREP® (FR-EPR/CPE) UL Type TC-ER	4350	☑	☑	☑	☑	☑	☑	☑
 Ultrol® (FR-XLPE/Hypalon®) Class 1E Nuclear	325	☑	☑	☑	☑	☑	☑	☑
SINGLE CONDUCTOR 600V POWER CABLES—90°C WET OR DRY								
DuraSheath® (EPR/HYP) UL Type RHH/RHW-2/USE-2 LS	5050	☑	☑	☑	☑	☑	☑	☑
Unicon® FREP® (FR-EPR) UL Type RHH/RHW-2/USE-2	5100				☑	☑		☑
Unicon® XLPE (XLPE) UL Type RHH/RHW-2/USE-2	5250				☑	☑		☑
 Ultrol® (FR-XLPE/Hypalon®) Class 1E Nuclear	100, 125, 150, 175				☑	☑		☑
MEDIUM-VOLTAGE 5kV–35kV SHIELDED POWER CABLES—105°C								
UniShield® (EPR/Corrugated Copper Wire/Semi-Conducting CPE), MV-105	6100, 6300, 6500				☑	☑		☑
Uniblend® (EPR/Copper Tape/PVC) Single Conductor, MV-105	6150, 6350, 6550				☑	☑		☑
Uniblend® (EPR/Copper Tape/PVC) Three Conductor, MV-105	6250, 6450, 6600				☑	☑		☑
COPPER AND FIBER OPTIC COMMUNICATION CABLES	Various Constructions	☑	☑	☑	☑	☑	☑	☑



